

CLAIMS

1. Folding rectangular parallelepiped box (1) which
opens at the top, comprising a base wall (3) and a
5 rectangular upper frame (2), together with four
side walls (4, 5), two facing walls, called the
first walls (5), being articulated to the base (3)
or frame (2) while the other two facing walls,
called the second walls (4), consisting of two
10 leaves (40, 41) one of which is articulated to an
axis (L_3) parallel to the base (3), are also
articulated both to the base (3) and to the frame
(2) in such a way that after pivoting the first
walls (5) inwards to bring them into a plane
15 parallel with the base (3), the two leaves (40,
41) of the second walls (4) can be pivoted about
said axis (L_3) to bring them into a position in
which they are folded one on the other towards the
inside of the box in a position substantially
20 parallel to said base (3), the base (3) and said
second walls (4) consisting of a single folded
sheet (F_2) of plastic or cardboard, while the axes
of articulation of said walls (4) to the base and
to the frame (2), and of the leaves (40, 41) to
25 one another, consist of fold lines (L_2 , L_3 , L_4),
characterized in that the upper leaf (41) of the
second walls (4) is extended by a reinforcing
plate (42) with dimensions substantially identical
to those of said walls (4), this plate surrounding
30 said frame (2) and being secured to the inner face
of said upper leaf (41), in such a way that when
the box is in the erect position, this plate (42)
presses against the associated second wall (4),
while in the folded position the lower part (420)
35 of this plate (42) is detached from the second
wall (4) and forms an inverted "Y" therewith.

2. Box according to Claim 1, characterized in that said plastic consists of cellular polypropylene, in particular extruded, or solid polypropylene.
- 5 3. Box according to Claim 1 or 2, characterized in that said frame (2) consists of a cylindrical metal wire, for example made of steel.
- 10 4. Box according to one of Claims 1 to 3, characterized in that an additional reinforcing element (8) is inserted between the upper leaf (41) of the second walls (4) and the reinforcing plate (42).
- 15 5. Box according to one of Claims 1 to 3, characterized in that said reinforcing plate (42) is itself extended by a flap (43-44) which is folded at least once on itself, against said reinforcing plate (42), in such a way as to form
20 an additional reinforcing element (8) inserted between said upper leaf (41) of the second walls (4) and the reinforcing plate (42).
- 25 6. Box according to one of the preceding claims, characterized in that said first walls (5) are articulated to the frame (2) and in that they are extended by a reinforcing plate (50) which surrounds the frame (2) and is secured to their inner face.
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7. Box according to Claim 6, characterized in that an additional reinforcing element (8) is inserted between said first walls (5) and their reinforcing plate (50).
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8. Box according to Claim 6 or 7, characterized in that said first walls (5) and/or said second walls (4) comprise a recess (51) forming a handle.

9. Box according to either of Claims 6 and 7 in combination with Claim 8, characterized in that said recess (51) is positioned at the top of said first walls (5) and exposes a part of the frame (2), in such a way that it constitutes a gripping handle.
10. Box according to one of the preceding claims, characterized in that said base (3) is secured to a reinforcing plate (9, 9').
11. Box according to one of the preceding claims, characterized in that the corners of said base (3) bear, directly or via said reinforcing plate (9, 9'), on "foot" cups (30).
12. Box according to Claim 11, characterized in that the corners of the upper rectangular frame (2) have "stacking" cups (24) positioned in such a way that when two identical boxes are stacked, the foot cups (30) of the upper box bear on the top (242) of the stacking cups (24) of the lower box.
13. Box according to one of Claims 10 to 12, characterized in that along two of its opposite edges, said plate (9) comprises a stop (6) for said first walls (5) in the vertical position.
14. Box according to one of the preceding claims, characterized in that at least the inward-facing face of said walls (4, 5) is smooth.